
United States District Court

EASTERN DISTRICT OF OKLAHOMA

In the matter of the search of:

Geolocation data of devices travelling within the
Eastern District of Oklahoma on 02-12-2023,
stored by Google LLC, 1600 Amphitheatre
Parkway Mountain View, CA 94043

Case No. 23-MJ-176-DES

APPLICATION FOR SEARCH WARRANT

I, Special Agent Brittany Nguyen, a federal law enforcement officer or an attorney for the government, request a search warrant and state under penalty of perjury that I have reason to believe that there is now concealed on the following person or property located in the NORTHERN District of CALIFORNIA (*identify the person or describe property to be searched and give its location*):

SEE ATTACHMENT "A":

The person or property to be searched, described above, is believed to conceal (*identify the person or describe the property to be seized*):

SEE ATTACHMENT "B"

The basis for the search under Fed. R. Crim. P. 41(c) is (*check one or more*):

- evidence of a crime;
- contraband, fruits of crime, or other items illegally possessed;
- property designed for use, intended for use, or used in committing a crime;
- a person to be arrested or a person who is unlawfully restrained.

The search is related to a violation of Title 18, United States Code, Section(s) 81, 1151, and 1152, and the application is based on these facts:

- Continued on the attached sheet.
- Delayed notice of _____ days (give exact ending date if more than 30 days: _____) is requested under 18 U.S.C. § 3103a, the basis of which is set forth on the attached sheet.

Brittany Nguyen
Brittany Nguyen
Special Agent
Bureau of Alcohol, Tobacco, Firearms, and Explosives

Sworn to :

Date: June 26, 2023

City and state: Muskogee, Oklahoma





Judge's signature
D. EDWARD SNOW
UNITED STATES MAGISTRATE JUDGE
Printed name and title

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF OKLAHOMA

IN THE MATTER OF THE SEARCH OF
GEOLOCATION DATA OF DEVICES
TRAVELLING WITHIN THE EASTERN
DISTRICT OF OKLAHOMA ON 02-12-
2023, STORED BY GOOGLE LLC, 1600
AMPHITHEATRE PARKWAY,
MOUNTAIN VIEW, CA 94043

Case No. 23-MJ-176-DES

**AFFIDAVIT IN SUPPORT OF
AN APPLICATION FOR A SEARCH WARRANT**

I, Brittany Nguyen, being first duly sworn, hereby depose and state as follows:

INTRODUCTION AND AGENT BACKGROUND

1. I make this affidavit in support of an application for a warrant to search information that is stored at premises controlled by Google, an electronic communication service and remote computing service provider headquartered in Mountain View, California. The information to be searched is described in the following paragraphs and in Attachment A. This affidavit is made in support of an application for a search warrant under Title 18, United States Code, Section 2703(c)(1)(A) and Federal Rule of Criminal Procedure 41 to require Google to disclose to the government the information further described in Attachment B.I. Upon receipt of that information, the government will then review that information and seize the information that is further described in Attachment B.II.

2. I am a federal law enforcement officer as defined under Federal Rule of Criminal Procedure 41(a)(2)(C). I am authorized to request this search warrant because I am a government agent who is engaged in enforcing federal criminal laws, including violations of the General Crimes Act (GCA), Title 18, United States Code, Section 1152, and the Major Crimes Act (MCA), Title 18, United States Code, Section 1153, and I am within the category of officers authorized by

the Attorney General to request such a warrant. I am a Special Agent (SA) with the Department of Justice, Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF) and have been employed in this capacity since January 2021. I am currently assigned to the Tulsa Field Office, Group II within the Dallas Field Division, whose area of responsibility encompasses the Northern and Eastern Districts of Oklahoma. As part of my employment with the ATF, your affiant attended and graduated from the Federal Law Enforcement Training Center (FLETC) in Brunswick, Georgia. This included graduating from both the 14-week FLETC Criminal Investigator Training Program (CITP) and 16-week ATF Special Agent Basic Training (SABT) program. Both programs included training particular to federal law, interviewing techniques, and evidence recognition and handling. The ATF SABT program also included training particular to firearms identification and handling, federal firearms laws, arson investigative training, and explosives investigative training.

3. Prior to my position as a Special Agent for ATF, I obtained a Texas Commission of Law Enforcement (TCOLE) license and was a certified Texas Peace Officer for approximately three (3) years. Additionally, I was a Sheriff's Deputy for the Jefferson County Sheriff's Office in Beaumont, Texas for approximately three (3) years and completed numerous investigations involving violent crime, domestic violence, weapon violations, and narcotic violations. I attended and graduated from Lamar University in Beaumont, Texas with a Bachelor of Science degree in Psychology and a Minor degree in Biology and Chemistry.

4. This affidavit is intended to show merely that there is sufficient probable cause for the requested warrant and does not set forth all of my knowledge about this matter. The statements contained in this affidavit are based in part on: my personal knowledge and observations during this investigation; information provided by other law enforcement officers; and my review of records, documents, and other evidence obtained during this investigation. In addition, unless

otherwise included, all statements contained in this affidavit are summaries in substance and in part.

5. Based on my training and experience and the facts set forth in this affidavit, there is probable cause to believe that Arson in Indian Country has been committed in violation of Title 18, United States Code, Sections 81, 1151, and 1152. There is also probable cause to search the information described in Attachment A for evidence of the crime as further described in Attachment B.

JURISDICTION

6. This Court has jurisdiction to issue the requested warrant because it is “a court of competent jurisdiction” as defined by Title 18, United States Code, Section 2711. Specifically, the Court is “district court of the United States . . . that has jurisdiction over the offense being investigated.” Title 18, United States Code, Section 2711(3)(A)(i).

7. The facts and circumstances alleged in this affidavit occurred within the Eastern District of Oklahoma and in Indian Country. More specifically, 90431 S. 4680 Rd., Sallisaw, Oklahoma 74955 is within the geographic boundaries of the Cherokee Nation Reservation and, therefore, is within Indian Country. Attachment A includes a visual depiction of this location and the surrounding area. GPS coordinates are also included in Attachment A.

BACKGROUND RELATING TO GOOGLE AND RELEVANT TECHNOLOGY

8. I know that the use of cellular technology has increased to the point where most persons carry on their person a cellular telephone. In *Carpenter v. United States*, 138 S.Ct. 2206, 2211 (2018), the Supreme Court noted that “[t]here are 396 million cell phone service accounts in the United States – for a Nation of 326 million people.” The Court added that a cell phone is almost “a feature of human anatomy,” and that “nearly three-quarters of smart phone users report

being within five feet of their phones most of the time, with 12% admitting that they even use their phones in the shower.” *Id.* at 2218 (quotations and citations omitted). The Court recognized that “cell phones and the services they provide are such a pervasive and insistent part of daily life that carrying one is indispensable to participation in modern society.” *Id.* at 2220 (quotation and citation omitted).

9. Based on my training and experience, I know that cellular devices, such as mobile telephone(s), are wireless devices that enable their users to send or receive wire and/or electronic communications using the networks provided by cellular service providers. Using cellular networks, users of many cellular devices can send and receive communications over the Internet.

10. I also know that many devices, including cellular devices, can connect to wireless Internet (“wi-fi”) access points if the user enables wi-fi connectivity. These devices can, in such cases, enable their users to send or receive wire and/or electronic communications via the wi-fi network. A tablet such as an iPad is an example of a device that may not have cellular service but that could connect to the Internet via wi-fi. Wi-fi access points, such as those created using a router and offered in places like homes, hotels, airports, and coffee shops, are identified by a service set identifier (“SSID”) that functions as the name of the wi-fi network. In general, devices with wi-fi capability routinely scan their environment to determine what wi-fi access points are within range and will display the names of networks within range under the device’s wi-fi settings.

11. Based on my training and experience, I also know that many devices, including many cellular and mobile devices, feature Bluetooth functionality. Bluetooth allows for short-range wireless connections between devices, such as between a device such as a cellular phone or tablet and Bluetooth-enabled headphones. Bluetooth uses radio waves to allow the devices to exchange information. When Bluetooth is enabled, a device routinely scans its environment to

identify Bluetooth devices, which emit beacons that can be detected by devices within the Bluetooth device's transmission range, to which it might connect.

12. Based on my training and experience, I also know that many cellular devices, such as mobile telephones, include global positioning system ("GPS") technology. Using this technology, the device can determine its precise geographical coordinates. If permitted by the user, this information is often used by apps installed on a device as part of the apps' operation.

13. Based on my training and experience, I know Google is a company that, among other things, offers an operating system ("OS") for mobile devices, including cellular phones, known as Android. Nearly every device using the Android operating system has an associated Google account, and users are prompted to add a Google account when they first turn on a new Android device.

14. In addition, based on my training and experience, I know that Google offers numerous apps and online-based services, including messaging and calling (*e.g.*, Gmail, Hangouts, Duo, Voice), navigation (Maps), search engine (Google Search), and file creation, storage, and sharing (*e.g.*, Drive, Keep, Photos, and YouTube). Many of these services are accessible only to users who have signed into their Google accounts. An individual can obtain a Google account by registering with Google, and the account identifier typically is in the form of a Gmail address (*e.g.*, example@gmail.com). Other services, such as Maps and YouTube, can be used with limited functionality without the user being signed-in to a Google account.

15. Based on my training and experience, I also know Google offers an Internet browser known as Chrome that can be used on both computers and mobile devices. A user can sign-in to a Google account while using Chrome, which allows the user's bookmarks, browsing history, and other settings to be uploaded to Google and then synced across the various devices on

which the subscriber may use the Chrome browsing software, although Chrome can also be used without signing into a Google account. Chrome is not limited to mobile devices running the Android operating system and can also be installed and used on Apple devices and Windows computers, among others.

16. Based on my training and experience, I know that, in the context of mobile devices, Google's cloud-based services can be accessed either via the device's Internet browser or via apps offered by Google that have been downloaded onto the device. Google apps exist for, and can be downloaded to, devices that do not run the Android operating system, such as Apple devices.

17. According to my training and experience, as well as open-source materials published by Google, I know that Google offers accountholders a service called "Location History," which authorizes Google, when certain prerequisites are satisfied, to collect and retain a record of the locations where Google calculated a device to be based on information transmitted to Google by the device. That Location History is stored on Google servers, and it is associated with the Google account that is associated with the device. Each accountholder may view their Location History and may delete all or part of it at any time.

18. Based on my training and experience, I know that the location information collected by Google and stored within an account's Location History is derived from sources including GPS data and information about the wi-fi access points and Bluetooth beacons within range of the device. Google uses this information to calculate the device's estimated latitude and longitude, which varies in its accuracy depending on the source of the data. Google records the margin of error for its calculation as to the location of a device as a meter radius, referred to by Google as a "maps display radius," for each latitude and longitude point.

19. Based on open-source materials published by Google and my training and experience, I know that Location History is not turned on by default. A Google accountholder must opt-in to Location History and must enable location reporting with respect to each specific device and application on which they use their Google account for that usage to be recorded in Location History. A Google accountholder can also prevent additional Location History records from being created at any time by turning off the Location History setting for their Google account or by disabling location reporting for a particular device or Google application. When Location History is enabled, however, Google collects and retains location data for each device with Location Services enabled, associates it with the relevant Google account, and then uses this information for various purposes, including to tailor search results based on the user's location, to determine the user's location when Google Maps is used, and to provide location-based advertising. As noted above, the Google accountholder also could view and, if desired, delete some or all Location History entries at any time by logging into their Google account or by enabling auto-deletion of their Location History records older than a set number of months.

20. Location data, such as the location data in the possession of Google in the form of its users' Location Histories, can assist in a criminal investigation in various ways. As relevant here, I know based on my training and experience that Google can determine, based on location data collected and retained via the use of Google products as described above, devices that were likely in a particular geographic area during a particular time frame and to determine which Google account(s) those devices are associated with. Among other things, this information can indicate that a Google accountholder was near a given location at a time relevant to the criminal investigation by showing that his/her device reported being there.

21. Based on my training and experience, I know that when individuals register with Google for an account, Google asks subscribers to provide certain personal identifying information. Such information can include the subscriber's full name, physical address, telephone numbers and other identifiers, alternative email addresses, and, for paying subscribers, means and source of payment (including any credit or bank account number). In my training and experience, such information may constitute evidence of the crimes under investigation because the information can be used to identify the account's user or users. Based on my training and my experience, I know that even if subscribers insert false information to conceal their identity, this information often provides clues to their identity, location, or illicit activities.

22. Based on my training and experience, I also know that Google typically retains and can provide certain transactional information about the creation and use of each account on its system. This information can include the date on which the account was created, the length of service, records of login (*i.e.*, session) times and durations, the types of service utilized, the status of the account (including whether the account is inactive or closed), the methods used to connect to the account (such as logging into the account via the provider's website), and other log files that reflect usage of the account. In addition, Google often has records of the Internet Protocol address ("IP address") used to register the account and the IP addresses associated with particular logins to the account. Because every device that connects to the Internet must use an IP address, IP address information can help to identify which computers or other devices were used to access the account.

PROBABLE CAUSE

23. On February 12, 2023, Special Agents and Task Force Officers with the Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF) were contacted to assist Adair County

Sheriff's Office (ACSO) with investigating a structure fire at 90431 S. 4680 Rd., Sallisaw, Oklahoma 74955 (the residence). ACSO received a call from Stilwell Police Department (SPD) at 1:58 p.m. regarding the structure fire at the residence.

24. Prior to ATF's arrival, ACSO Investigator A. Cluck conducted an interview with Chase Duncan, son of Leo Duncan who is the owner of the residence. When speaking with Chase, Investigator Cluck learned that Leo Duncan allows Chase to live at the residence. Chase stated that he stayed at Leo's home and did not stay at the residence during the night of February 11, 2023 because the residence did not have any power. Chase advised that he was asleep at Leo's home when his nephew woke him up and said that the residence had smoke coming from it. Chase stated he ran towards the residence. Chase discovered that the front door was wide open, but the back door was still locked. Chase attempted to extinguish the fire with buckets of water but was unsuccessful. Chase saw his red, plastic gas can, that was originally outside, inside the house, lying on the living room floor.

25. The Stilwell and Greasy Fire Departments responded. Firemen who entered the residence smelled the odor of gasoline and saw that the fire was concentrated in the center of the floor between the living room and kitchen area.

26. ATF Task Force Officers (TFOs) that are Certified Fire Investigation Technicians (FITs) examined the fire scene and concluded that the fire was incendiary. Based on their training and experience, due to fire patterns and fire dynamics of the fire, ATF TFO FITs believe the fire was burning for at least 1.5 hours before law enforcement notification.

27. The area of 90431 S. 4680 Rd. is rural without many nearby businesses. The typical person driving through the area would either reside in a neighboring home or be visiting someone

residing in a neighboring home. The requested search warrant would reveal persons that do not live in or regularly visit the area.

28. Based on the foregoing, I submit that there is probable cause to search information that is currently in the possession of Google and that relates to the devices that reported being within the location described in Attachment A during the time described in Attachment A for evidence of the crimes under investigation. The information to be searched includes (1) identifiers of each device; (2) the location(s) reported by each device to Google and the associated timestamp; and (3) basic subscriber information for the Google account(s) associated with each device.

29. The proposed warrant sets forth a multi-step process whereby the government will obtain the information described above. Specifically, as described in Attachment B.I:

- a. Using Location History data, Google will identify those devices that it calculated were or could have been (based on the associated margin of error for the estimated latitude/longitude point) within the Target Locations described in Attachment A during the times described in Attachment A. For each device, Google will provide an anonymized identifier, known as a Reverse Location Obfuscation Identifier (“RLOI”), that Google creates and assigns to devices for purposes of responding to this search warrant; Google will also provide each device’s location coordinates along with the associated timestamp(s), margin(s) of error for the coordinates (*i.e.*, “maps display radius”), and source(s) from which the location data was derived (*e.g.*, GPS, wi-fi, bluetooth), if available. Google will not, in this step, provide the Google account identifiers (*e.g.*, example@gmail.com) associated with the devices or basic subscriber information for those accounts to the government.

- b. The government will identify to Google the devices appearing on the list produced in step 1 for which it seeks the Google account identifier and basic subscriber information. The government may, at its discretion, identify a subset of the devices.
- c. Google will then disclose to the government the Google account identifier associated with the devices identified by the government, along with basic subscriber information for those accounts.

30. This process furthers efficiency and privacy by allowing for the possibility that the government, upon reviewing contextual information for all devices identified by Google, may be able to determine that one or more devices associated with a Google account (and the associated basic subscriber information) are likely to be of heightened evidentiary value and warrant further investigation before the records of other accounts in use in the area are disclosed to the government.

CONCLUSION

31. Based on the foregoing, I request that the Court issue the proposed warrant, pursuant to Title 18, United States Code, Section 2703(c) and Federal Rule of Criminal Procedure 41.

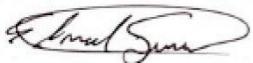
32. I further request that the Court direct Google to disclose to the government any information described in Section I of Attachment B that is within its possession, custody, or control. Because the warrant will be served on Google, who will then compile the requested records at a time convenient to it, reasonable cause exists to permit the execution of the requested warrant at any time in the day or night.

Respectfully submitted,

Brittany Nguyen

Brittany Nguyen, Special Agent
Bureau of Alcohol, Tobacco, Firearms, and
Explosives

Sworn to on this 26th day of June, 2023

D. 

UNITED STATES MAGISTRATE JUDGE
EASTERN DISTRICT OF OKLAHOMA

ATTACHMENT A

PROPERTY TO BE SEARCHED

This warrant is directed to Google LLC and applies to:

- (1) Location History data, sourced from information including GPS data and information about visible wi-fi points and Bluetooth beacons transmitted from devices to Google, reflecting devices that Google calculated were or could have been (as indicated by margin of error, *i.e.*, “maps display radius”) located within the geographical region bounded by the latitudinal and longitudinal coordinates, dates, and times below (“Initial Search Parameters”); and
- (2) identifying information for Google Accounts associated with the responsive Location History data.

Initial Search Parameters

Target Location:

Date & Time Period (including time zone):

From: February 12, 2023: 11:30 AM Central Time Zone

To: February 12, 2023: 12:30 PM Central Time Zone.

Geographical area identified as a polygon defined by the following latitude/longitude coordinates and connected by straight lines:

- 35.708103, -94.684690
- 35.708138, -94.681965
- 35.706513, -94.684657
- 35.706478, -94.681755

This area is approximately 0.08 of a mile.

Visual Depiction of Location



ATTACHMENT B

Particular Things to be Seized

I. Information to be disclosed by Google

The information described in Attachment A, via the following process:

1. Google shall query location history data based on the Initial Search Parameters specified in Attachment A. For each location point recorded within the Initial Search Parameters, and for each location point recorded outside the Initial Search Parameters where the margin of error (*i.e.*, “maps display radius”) would permit the device to be located within the Initial Search Parameters, Google shall produce to the government information specifying the corresponding unique device ID, timestamp, location coordinates, display radius, and data source, if available (the “Device List”).

2. The government shall review the Device List and identify to Google the devices about which it seeks to obtain Google account identifier and basic subscriber information. The government may, at its discretion, identify a subset of the devices.

3. Google shall disclose to the government identifying information, as defined in Title 18, United States Code, Section 2703(c)(2), for the Google Accounts associated with each device ID appearing on the Device List about which the government inquires.

II. Information to Be Seized

All information described above in Section I that constitutes evidence of a violation of Title 18, United States Code, Sections 81, 11151, and 1152 (Arson in Indian Country).

This warrant authorizes a review of electronically stored information, communications, other records and information disclosed pursuant to this warrant in order to locate evidence, fruits, and instrumentalities described in this warrant. The review of this electronic data may be

conducted by any government personnel assisting in the investigation, who may include, in addition to law enforcement officers and agents, attorneys for the government, attorney support staff, and technical experts. Pursuant to this warrant, the FBI may deliver a complete copy of the disclosed electronic data to the custody and control of attorneys for the government and their support staff for their independent review.